

## **Historic, Archive Document**

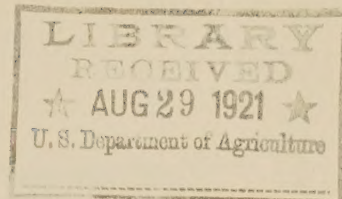
Do not assume content reflects current scientific knowledge, policies, or practices.



1.9  
5315  
cop. 2

INSECT PEST SURVEY

Bureau of Entomology, U. S. D. A.  
and  
State Entomological Agencies, cooperation



Special Report No. 10.

April 25, 1921.

JOINT WORM VERY NUMEROUS IN TENNESSEE

Harmolita grandis, Riley

Tennessee. Mr Geo. Ainslie of the Bureau of Entomology under date of April 14, reports from Knoxville, as follows: "I have never seen so much joint worm as there is this year. Almost every field visited has an appreciable amount and in some places it is very severe. When we first found it the progeny of the minutum adults were about half grown in the little deformed tillers. Now they are rapidly pupating, and unless something happens to prevent their emergence and oviposition it seems certain that the next generation will be large enough to take practically every stem. The fields seem generally infested too, not in patches but uniformly throughout. A good deal of wheat land was replanted to wheat last Fall, here of course no migration is necessary."

FURTHER NOTES ON SEED CORN MAGGOT IN POTATOES

Hylemyia cilicrura Rond.

(Formerly Pegomyia fusciceps)

Virginia. Professor W. J. Schoene, State Entomologist of Virginia, under date of April 18 reports: "We have had a number of reports from the Truck Experiment Station, from County Agents, and from Dr. F. P. Fromme, the Plant Pathologist at the Experiment Station regarding the prevalence of the Seed Corn Maggot (Phorbia fusciceps) in Eastern Virginia."

Dr. Fromme has just spent a number of days in Eastern Virginia, in going over some of the potato fields. He reports that he is of the opinion that the Seed Corn Maggot is not responsible for the primary injury; that the chief difficulty is that the potatoes are affected with the fusarium rot which is the primary cause of the trouble. Dr. Fromme tells me that this Fusarium disease of potatoes requires a very high temperature for development and it appears that the high temperatures were present at the planting time in the Eastern Shore this year. He further reports that he found some potatoes which were rotting and which were not infested with the maggot.

Some years ago in making collections of the closely related species Pegomyia brassica I very frequently took the larvae of the seed corn maggot and I was unable to find these larvae in any but ~~decaying~~ "tissue."

Mr. M. Shapovalov of the Bureau of Plant Industry in a report dated April 11-14 says: "The outbreak in Eastern Virginia is quite general. Some perfect fields, or portions of fields, are to be found in central and northern Northampton County, but 15 per cent of missing hills is very



REPORT OF THE COMMISSIONER

OF THE LAND OFFICE

1887

ALBANY: J. B. LEECH, 1887.

REPORT OF THE COMMISSIONER

OF THE LAND OFFICE

1888

ALBANY: J. B. LEECH, 1888.

The report of the Commissioner of the Land Office for the year 1887, is a valuable contribution to the knowledge of the land resources of the State. It contains a detailed account of the land owned by the State, and of the land that has been sold or leased during the year. The report also contains a list of the land that has been reserved for public use, and a list of the land that has been reserved for private use. The report is a valuable document for the people of the State, and for the people of other States.

REPORT OF THE COMMISSIONER

OF THE LAND OFFICE

1889

ALBANY: J. B. LEECH, 1889.

The report of the Commissioner of the Land Office for the year 1888, is a valuable contribution to the knowledge of the land resources of the State. It contains a detailed account of the land owned by the State, and of the land that has been sold or leased during the year. The report also contains a list of the land that has been reserved for public use, and a list of the land that has been reserved for private use. The report is a valuable document for the people of the State, and for the people of other States.

The report of the Commissioner of the Land Office for the year 1889, is a valuable contribution to the knowledge of the land resources of the State. It contains a detailed account of the land owned by the State, and of the land that has been sold or leased during the year. The report also contains a list of the land that has been reserved for public use, and a list of the land that has been reserved for private use. The report is a valuable document for the people of the State, and for the people of other States.

The report of the Commissioner of the Land Office for the year 1890, is a valuable contribution to the knowledge of the land resources of the State. It contains a detailed account of the land owned by the State, and of the land that has been sold or leased during the year. The report also contains a list of the land that has been reserved for public use, and a list of the land that has been reserved for private use. The report is a valuable document for the people of the State, and for the people of other States.

common, 25 to 30 per cent is frequent, and 50 to 75 per cent has been observed.

The destruction is apparently brought about by two agencies: The Seed-corn Maggot and Fusarium spp. In certain cases the animal and plant parasites act singly and independently. In others they work together, making exact determination of the cause of trouble impossible. It appears that insect injury is predominant on the mainland while fungous rot was the outstanding feature on the Peninsula.

On examination of a considerable number of hills clear cases of maggot injury could be seen.

High temperature with low rainfall at planting time, soil type and drainage, storage and handling of the seed, and method of fertilizer application, also seemed to be secondary limiting factors in individual cases in the extent of damage in this region,

Mr. W. H. White, of the Office of Truck Crop Insect Investigations of the Bureau of Entomology, reports, under date of April 21, 1921, that the failure of the potatoes to germinate in a normal manner in some of the fields in the vicinity of Norfolk, Va., was due, in the writer's opinion, to the attack of maggots in some instances and to a fungus in others. In cases where the potatoes germinated but made a very slow growth and produced unhealthy plants, it was due to the attack of the maggot, in many instances accompanied by rot. But in cases where the potatoes failed to germinate, fungus was always present. It would be impossible to estimate the damage caused by either of these agencies, because a large percentage of the seed pieces after being attacked germinated and the plant developed but with much less vigor than under normal conditions and it is not possible that these plants will produce a full crop. During the warm weather of March, the adult of the seed-corn maggot was very active and the flies were attracted to the potato fields by the decaying organic matter in the form of organic fertilizer, such as fish scrap, tankage and dried blood. The plowing under of kale was also an attraction for the flies, as maggots of this species were usually abundant in such fields. Where uncut potatoes were examined, they did not show any indication of either fungus or maggot injury.

Maryland. Professor E. N. Corey, State Entomologist of Maryland, reports under date of April 23 that he received specimens from Hurlock, Maryland, with the following communication: "Under separate cover I am sending you a few pieces of potatoes I planted several weeks ago and I find that they are full of little worms which I am sure you will notice. They were planted on land on which crimson clover was turned under and the seed is home grown. I also planted some Northern seed which does not show any rot."



1. The first part of the report is devoted to a general survey of the situation in the country.

2. The second part of the report is devoted to a detailed analysis of the economic situation in the country.

3. The third part of the report is devoted to a detailed analysis of the social situation in the country.

4. The fourth part of the report is devoted to a detailed analysis of the political situation in the country.

5. The fifth part of the report is devoted to a detailed analysis of the cultural situation in the country.

6. The sixth part of the report is devoted to a detailed analysis of the international situation in the country.